

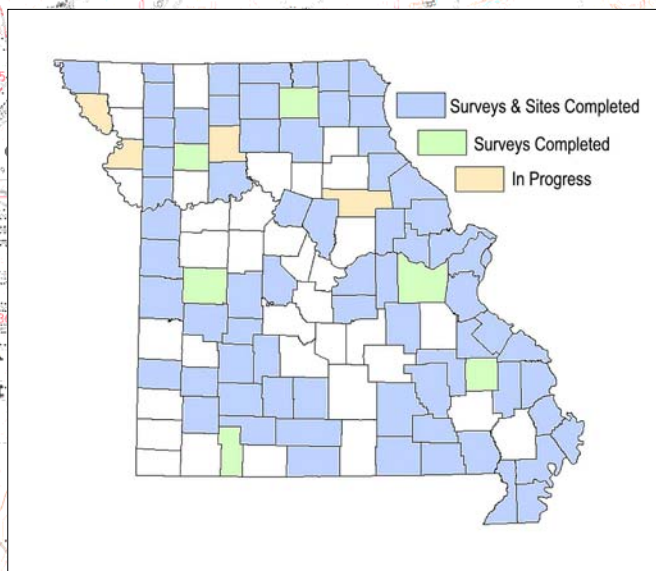
# GIS Capture of Missouri Archaeology Surveys and Sites

Dyanna Pursell<sup>1</sup>, Dr. David Diamond<sup>1</sup>, C. Diane True<sup>1</sup>, Michael Morey<sup>1</sup>, Brad Harris<sup>1</sup>, Melissa M. Lanclos\*, Robert Reeder<sup>2</sup>, George Kopp<sup>2</sup>, Kerry Nichols<sup>3</sup>, and Brant Vollman<sup>3</sup>

<sup>1</sup>Missouri Resource Assessment Partnership (MoRAP) \* Formerly MoRAP <sup>2</sup>Missouri Department of Transportation (MoDOT)

<sup>3</sup>Missouri Department of Natural Resources/State Historic Preservation Office (DNR/SHPO)

This project represents the usability and necessity of a digital representation of archaeological surveys and sites as an aid to cultural resource management and planning.



## Surveys vs. Sites

A **survey** is the area that was investigated for the presence of archaeological artifacts

A **site** is the location where archaeological artifacts are found

## The Total Number of Sites and Surveys Digitized\*:

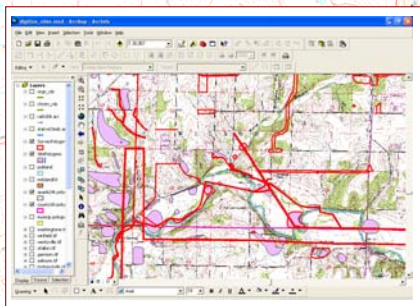
Total Surveys Captured for the Project: 12,000 polygons

Total Sites Captured for the Project: 14,470 polygons

Surveys Fully Attributed for the Project: 7,400

Sites Fully Attributed for the Project: 8,500

\*As of February 28, 2006



Example of the Archaeology Geodatabase

The data is stored and managed in a geodatabase using a spatial database engine (SDE) on a structured query language (SQL) server. Relationship classes are used to relate (link) tables using a common identifier

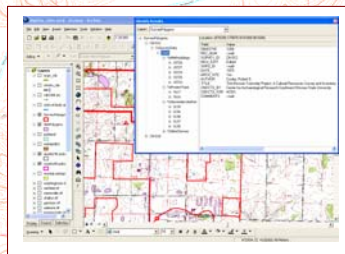
Red polygons are surveys

Purple polygons are sites

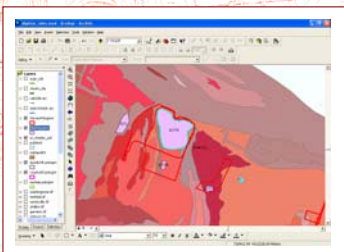
## Usability of the Archaeology Geodatabase

In the past, it took many hours to sort through the boxes of data to locate the information needed for a new project. This geodatabase allows that to be accomplished in a fraction of the time.

- Areas of interest can be zoomed into and existing surveys and sites can be identified quickly to see the associated data
- Data can be queried and sorted by any related table attributes associated with the polygons
  - Specific year
  - Particular author



Information associated with surveys and sites can be quickly pulled up



Example of a query: sites found on a specific soil type in St. Charles County

• Ancillary data (geology, roads, soils, etc.) can be incorporated into the geodatabase for more advanced queries

Examples would be:

- Sites within a specific county that exists on a specific soil type
- Surveys within a pre-determined distance of a stream
- Sites that fall along the I-70 corridor